

Notice of Allowability

Application No.

09/749,345

Applicant(s)

SHIMAKAWA ET AL.

Examiner

James S. Wozniak

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on 10/29/2007.
2. ☒ The allowed claim(s) is/are 1-5 and 7-14 (now claims 1-13).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

1. In response to the office action from 9/28/2007, the applicant has submitted a request for continued examination, filed 10/29/2007, amending claims 1 and 10-11, while arguing to traverse the art rejection based on the amended limitations (*Amendment, Pages 13-14*). In response to the amended claims and for the reasons below, claims 1-5 and 7-14 are allowable over the prior art of record.

2. In response to the amended title, the examiner has withdrawn the previous corresponding objection.

3. In response to amended claim 11, the examiner has withdrawn the previous 35 U.S.C. 101 rejection.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Presson (*Reg. No. 41,442*) on 11/26/2007.

5. The application has been amended as follows:

In claim 11, line 5, change "state of the apparatus" to --state of an apparatus--.

Allowable Subject Matter

6. **Claims 1-5 and 7-14** are allowable over the prior art of record.

7. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1, 10 and 11**, the prior art of record fails to explicitly teach or fairly suggest, either individually or in combination, a speech synthesis system, method, or computer readable medium encoded with a program for use in a robot that switches between a plurality of substitutable text dictionaries used for text-to-speech synthesis based on detected behavioral and emotional state factors and a number of times these factors have been changed, as set forth in claims 1 and 10-11.

Pertinent prior art:

Kamiya et al (*U.S. Patent: 6,175,772*) evidences that a robot capable of detecting a behavior (*Col. 4, Lines 39-46*), generating emotion (*Col. 7, Line 33- Col. 8, Line 58*), and synthesizing a voice (*Col. 10, Lines 25-43*) is well known in the prior art. Kamiya, however, fails to disclose combining emotional factors, behavioral factors, and the number of times

emotional and behavioral states have changed to select a text-to-speech dictionary, as is recited in the presently claimed invention.

Although Edatsune (*U.S. Patent: 5,802,488*) further evidences that certain vocabularies (*i.e., dictionaries*) for speech synthesis are selected based on an interactive item's maturity or behavior associated with age (*Col. 11, Line 7- Col. 12, Line 56*), Edatsune makes no mention of including detected emotional conditions with the behavioral factors to select a vocabulary in combination with also detecting the number of times emotional and behavioral states have changed to make such a selection.

Although Surace et al (*U.S. Patent: 6,144,938*) further discloses combining two types of information (*i.e., user and time information*) to select a synthesis prompt suite (*i.e., synthesis dictionary*) (*Col. 14, Lines 13-45; Col. 15, Lines 3-49; and Col. 16, Line 54- Col. 17, Line 6*), Surace does not mention that it is emotional and behavioral factors that are utilized for prompt suite selection in combination with also detecting the number of times emotional and behavioral states have changed to make such a selection.

Thus, claims 1 and 10-11 are allowable over the prior art of record.

Dependent claims 2-5, 7-9, and 12-14 further limit allowable independent claims, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

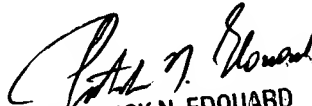
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See PTO-892.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
12/21/2007


PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER